CLAIMS

1. A laser power selecting method for selecting a laser power to record modulated codes on an information recording medium by use of a laser beam, characterized by comprising the steps of:

recording a predetermined signal pattern on the information recording medium;

reproducing the predetermined signal pattern recorded, and calculating an asymmetry value from the predetermined signal pattern reproduced;

obtaining a change rate of the asymmetry value relative to a laser power; and

selecting a laser power at which the change rate assumes a maximum value.

2. The laser power selecting method according to claim 1, wherein the predetermined signal pattern is a combination pattern which combines sequentially a first signal having at least one mark and at least one space which are respectively longer in length than the shortest mark and shortest space among modulated codes to be recorded, and a second signal having a plurality of marks equal in length to the shortest mark among the modulated codes to be recorded and a plurality of spaces shorter in length than the shortest space among the modulated codes to be recorded.

3. A laser power selecting method for selecting a laser power to record modulated codes on an information recording medium by use of a laser beam, the method comprising: recording a predetermined signal pattern on an information recording medium; reproducing the predetermined signal pattern recorded; and selecting a laser power on the basis of the predetermined signal pattern reproduced, wherein:

the predetermined signal pattern is a combination pattern which combines sequentially a first signal having at least one mark and at least one space which are respectively longer in length than the shortest mark and shortest space among modulated codes to be recorded, and a second signal having a plurality of marks equal in length to the shortest mark among the modulated codes to be recorded and a plurality of spaces shorter in length than the shortest space among the modulated codes to be recorded.

4. The laser power selecting method according to claim 3, wherein each of mark length and space length of the modulated codes to be recorded is expressed by nT where n is 3, 4, 5, 6, 7, 8, 9, 10, 11, or 14 and T is a channel clock cycle.

5. The laser power selecting method according to claim 4, wherein the first signal has mark and space lengths of 10T, 11T, or 14T.

6. The laser power selecting method according to claim 4 or 5, wherein the second signal has a mark length of 3T and a space length of

2T.

7. The laser power selecting method according to any one of claims 3 to 6, wherein in the step of selecting the laser power, an asymmetry value is calculated from the predetermined signal pattern reproduced, and a laser power is selected on the basis of the asymmetry value.

8. The laser power selecting method according to claim 7, wherein in the step of selecting the laser power, a change rate of the asymmetry value relative to a laser power is obtained from the asymmetry value, and a laser power at which the change rate assumes a maximum value is selected.

9. An information recording medium on which information is recorded by use of the method according to any one of claims 3 to 8, wherein information as to said space shorter than the shortest space length is recorded on the information recording medium.

10. The information recording medium according to claim 9, wherein information as to whether or not the laser power selecting method is applicable is recorded on the information recording medium.

11. An information recording medium on which information is recorded by use of the method according to any one of claims 1 to 8, wherein information as to whether or not the laser power selecting

method is applicable is recorded on the information recording medium.

12. An information recording device which records modulated codes on an information recording medium by use of a laser beam, characterized by:

recording means for recording a predetermined signal pattern on the information recording medium;

reproducing means for reproducing the predetermined signal pattern recorded by the recording means;

signal processing means for calculating an asymmetry value from the predetermined signal pattern reproduced by the reproducing means, and obtaining a change rate of the asymmetry value relative to a laser power; and

laser power adjusting means for selecting a laser power at which the change rate assumes a maximum value.

13. An information recording device which records modulated codes on an information recording medium by use of a laser beam, characterized by comprising:

recording means for recording a combination signal pattern on an information recording medium, the signal pattern combines sequentially a first signal having at least one mark and at least one space which are respectively longer in length than shortest mark and shortest space among modulated codes to be recorded, and a second signal having a plurality of marks equal in length to the shortest mark among the

modulated codes to be recorded and a plurality of spaces shorter than the shortest space among the modulated codes to be recorded;

reproducing means for reproducing the combination signal pattern recorded by the recording means; and

laser power adjusting means for selecting a laser power on the basis of the combination signal pattern reproduced by the reproducing means.

14. The information recording device according to claim 13, wherein each of mark length and space length of the modulated codes to be recorded is expressed by nT where n is 3, 4, 5, 6, 7, 8, 9, 10, 11, or 14 and T is a channel clock cycle.

15. The information recording device according to claim 14, wherein the first signal has mark and space lengths of 10T, 11T, or 14T.

16. The information recording device according to claim 14 or 15, wherein the second signal has a mark length of 3T and a space length of 2T.

17. The information recording device according to any one of claims 13 to 16, wherein the laser power adjusting means calculates an asymmetry value from the reproduced signal, and selects a laser power on the basis of the asymmetry value.

18. The information recording device according to claim 17, wherein the laser power adjusting means obtains a change rate of the asymmetry value relative to a laser power from the calculated asymmetry value, to select a laser power at which the change rate assumes a maximum value.

19. An information recording device which records modulated codes on the information recording medium according to claim 9, further comprising information reproducing means for reading information as to a space length shorter than the shortest space length and a laser power adjusting means for selecting a laser power on the basis of the information read.

20. The information recording device according to claim 19, wherein when modulated codes are recorded on the information recording medium according to claim 10, the information reproducing means reads information as to whether or not the laser power selecting method is applicable, and the laser power adjusting means determines whether or not the laser power selecting method according to any one of claims 3 to 8 should be adopted on the basis of the information read.

21. The information recording device according to claim 19 or 20, further comprising a memory device which stores therein the information as to the space length shorter than the shortest space length.